



Status Report
on
Caltrans/Industry
Rubberized Asphalt Concrete
Task Group

by
Terrie Bressette
and
Senor Gary Hicks

Caltrans Pavement Group



Organization of presentation

- Caltrans/Industry Rubberized Asphalt Task Group (RACTG)
 - Subcommittees on Asphalt rubber
 - Subcommittees on Modified Binders
- Activities of Subcommittees
- FHWA pooled fund studies
- Summary



RACTG

- Overall task group dealing with asphalt rubber and modified binders
- Co-chairs- Terrie Bressette and Jeff Reed
- Meets at least quarterly to discuss specifications, pilot projects and other relevant issues



Subcommittees on Asphalt Rubber

- Crumb rubber modifiers
- MB Evaluation of Pilot projects
- 5 Pilots-Rubberized AC w-5 year warranty
- Others to be established
 - RAC specifications and issues
 - MB specifications and issues



Subcommittees on Modified Binders

- Review of 10 pilots projects
- Plans for next series of pilot projects
 - Planning and selection of project sites
 - Evaluations-construction, lab testing , and performance
- HVS testing of modified binders -both wet process and MB vs. DGAC



Asphalt Rubber Project Reviews

- 1995- Van Kirk and Hildebrand
 - Performance problems related to construction
 - Identified need for a guide
 - Type 2 AR better than type 1; hence Caltrans adopted the use of only Type 2



Asphalt Rubber Project Reviews

- 1999-Caltrans/Industry
 - Draft prepared on projects constructed since 1995
 - Findings indicated that most projects are performing well
 - Report still has not been finalized



Crumb Rubber Issues

- Industry has had problems with meeting gradation
- Sampling methods evaluated and a new method recommended
- Caltrans/Industry are moving toward a Certificate of Compliance (COC) program
- This will require industry labs and technicians to be accredited and certified



Performance Criteria for Asphalt Rubber

- Caltrans/Industry are planning to develop performance related specs
- This was the result of a partnering session
- Performance tests for binders and mixes will be evaluated



5 Pilot AR Projects

- Directive from the chief engineer
- Projects will be placed in 2002 with 15% min. rubber
- No criteria for type- wet, dry, or modified
- Rubberized modified binders- Can be terminal or full blended
- RAC Projects will be gap- or dense graded
- Overlain with Open Graded AR
- All projects will be warranted for 5 years



2001 MB Evaluation Report

- 10 MB projects constructed in 1999
- Most were terminal blend, but some were field blend
- Performance survey conducted, but no binder testing
- Draft report prepared
- Will be finalized by end of year



2002 Plans for HVS testing

- Base layer constructed this fall and will be tested to failure by the end of spring 2002
- Overlays will include a control, MB and AR section
- These overlays sections will be placed in the summer of 2002 and tested to failure
- Comparison of layer equivalency will result



2002 Plans for 12 New Pilot Projects

- Lessons learned from first 10 pilots will be implemented
- Evaluation plan being developed now
- Projects will contain MB, AR and Control sections, similar to HVS tests
- Field projects are being solicited
- Draft of evaluation plan to be complete by the end of the year



FHWA Pooled Fund Study

- Will evaluate AR and MB binders using the ALF
- Caltrans will be participating in this with other SHA's
- Scheduled to begin in 2002
- Expected results include comparison of equivalencies



Summary

- Caltrans is actively working on both AR and MB binders
- Pilots projects are proceeding with both products
- Performance specifications is the desired outcome



Thank You

Any questions?